

WHAT IS CLAIMED IS:

1. A printhead in which a plurality of printing elements arranged in a predetermined direction and a driving circuit for driving the printing elements are
5 formed on a single substrate,
wherein the printing elements are classified into a plurality of groups and driven,
and said printhead including,
a selection circuit which is common to the
10 plurality of groups and selects a printing element to be driven in each group, and
data supply circuits for supplying driving data to the driving circuit for driving each printing element through any of a plurality of paths are
15 arranged on the substrate.
2. The printhead according to claim 1, wherein the data supply circuits supply the driving data through a path which shortens a wiring line to each printing element.
- 20 3. The printhead according to claim 1, wherein the data supply circuits are arranged on two sides of a printing element array.
4. The printhead according to claim 1, wherein the data supply circuits include a plurality of shift
25 registers for receiving clock and data signals, a plurality of latches for latching output signals from the shift registers, and AND circuits for performing a

logical product of outputs from the latches and a driving signal.

5. The printhead according to claim 1, wherein the printhead includes an inkjet printhead for printing
5 data by discharging ink.

6. The printhead according to claim 5, wherein the printhead includes a printhead for discharging the ink by using thermal energy, and comprises an electrothermal transducer for generating thermal energy
10 to be applied to the ink.

7. A head cartridge characterized by comprising:
the printhead in which a plurality of printing elements arranged in a predetermined direction and a driving circuit for driving the printing elements are
15 formed on a single substrate, wherein the printing elements are classified into a plurality of groups and driven, and said printhead includes, a selection circuit which is common to the plurality of groups and selects a printing element to be driven in each group,
20 and data supply circuits for supplying driving data to the driving circuit for driving each printing element through any of a plurality of paths are arranged on the substrate; and

an ink tank for storing ink to be supplied to the
25 printhead.

8. A printing apparatus for printing data by using the printhead in which a plurality of printing elements

arranged in a predetermined direction and a driving
circuit for driving the printing elements are formed on
a single substrate, wherein the printing elements are
classified into a plurality of groups and driven, and
5 the printhead including a selection circuit which is
common to the plurality of groups and selects a
printing element to be driven in each group, and data
supply circuits for supplying driving data to the
driving circuit for driving each printing element
10 through any of a plurality of paths are arranged on the
substrate, comprising

driving data generation means for generating a
data signal for each path of the data supply circuit.

9. A printhead element substrate in which a
15 plurality of printing elements arranged in a
predetermined direction and a driving circuit for
driving the printing elements are formed on a single
substrate, wherein

the printing elements are classified into a
20 plurality of groups and driven, and the printhead
element substrate including,

a selection circuit which is common to the
plurality of groups and selects a printing element to
be driven in each group, and
25 data supply circuits for supplying driving data
to the driving circuit for driving each printing
element through any of a plurality of paths are

arranged on the substrate.

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